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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,154	10/10/2000	Claudia J. Quigley	105690-136 (MKS-78)	4588

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EXAMINER

FERGUSON, MARISSA L

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 12/03/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/685,154

Applicant(s)

QUIGLEY ET AL.

Examiner

Marissa L Ferguson

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-5, 7-10, 11-17, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Pandorf et al. (U.S. Patent 5,932,332). Pandorf et al. teaches the claimed invention as follows: shell (216), pressure sensor disposed in the shell (220 and Abstract), heater (218) attached to the shell (Column 6, Lines 62-65) including first and second heating elements (232a, 232b), one or more electrical components for applying electrical signal (220, 220a), first and second heating elements connected in series (262, 264, and Column 19, Lines 15-66), conductive flexible diaphragm (210b), the method of heating at least a portion of a pressure transducer (Column 20, Lines 16-34), first and second heaters comprising and coupled to first and second heating elements (220d, 262), first and second heaters applying heat to the shell/pressure sensor (Column 20, Lines 16-34), and applying the electrical signal to first and second heating elements during a first period of time and a second period of time following (Column 20, Lines 35-67 and Column 21, Lines 1-35).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pandorf et al. (U.S. Patent 5,932,332) in view of Johnston (U.S. Patent 4,176,557). Pandorf et al. teaches the invention claimed except, he does not explicitly disclose that the first and second heating elements are connected in parallel.

Johnston discloses that the first and second heating elements are connected in parallel (Column 7, Lines 58-68 and Column 8, Lines 1-20).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Pandorf et al. to the elements taught by Johnston for the purpose of providing electrical connections between the heating elements.

Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pandorf et al (U.S. Patent 5,932,332) in view of Rickner (U.S. Patent 2,753,515). Pandorf et al teaches the invention claimed except, he does not explicitly disclose the switching element. Rickner discloses the switching element (Column 1, Lines 19-20 and Column 2, Lines 47-50).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention taught by Pandorf et al. to the

element taught by Rickner for the purpose of converting a change in a pressure differential.

3. Claims 19,20, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pandorf et al (U.S. Patent 5,932,332).

Pandorf discloses the first and second electrical resistances. However, he does not explicitly disclose that the resistances are equal or are different to each other

As best understood, the reference discloses an equation of total resistance. If the total resistance were equal to the first resistance then the second resistance would also be equal. Referring to the different resistances, it should be obvious that the circuit arrangement can be changed in various ways.

It was commonly known to those of ordinary skill in the art to disclose the first and second resistances being equal to each other and/or different to each other for the purpose of measuring the resistances in series.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the equation recognized in the art of Pandorf et al., as discussed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is 703-305-3194. The examiner can normally be reached on (M-F) 7:30am-4:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin R Fuller can be reached on 703-308-0079.

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Marissa L Ferguson
Examiner
Art Unit 2855

November 18, 2001


Benjamin R. Feller
Supervisory Patent Examiner
Technology Center 2800